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PATENT APPLICATION

ATTORNEY DOCKET NO. 200300734-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): David Champion et al.

Confirmation No.: 6089

Application No.: 10/767,732

Examiner: Natalie K. Walford

Filing Date: 01/28/2004

Group Art Unit: 2879

Title: PHOTONIC CRYSTAL FILAMENT AND METHODS

Mail Stop Appeal Brief-Patents
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on 11/13/2007.

☐ The fee for filing this Appeal Brief is $510.00 (37 CFR 41.20).

☒ No Additional Fee Required.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:

☐ 1st Month $120	☐ 2nd Month $460	☐ 3rd Month $1050	☐ 4th Month $1640

☐ The extension fee has already been filed in this application.

☒ (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account 08-2025 the sum of $ 00. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

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Date of facsimile: 11/13/2007
Typed Name: Theodore R. Touw
Signature: T. R. Touw

Respectfully submitted,
David Champion et al.
By T. R. Touw

Theodore R. Touw
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Rev 10/07(ApiBrief)

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Rev 10/07(ApiBrief)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellants: David Champion et al.	)	Date: November 13, 2007
Serial No. 10/767,732	)	Group Art Unit: 2879
Confirmation No. 6089	)	
Filed 01/28/2004	)	Examiner: Walford, Natalie K.
Title: PHOTONIC-CRYSTAL FILAMENT AND METHODS	)	

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
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Alexandria, VA 22313-1450

Sir:

1. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249, Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware corporation, headquartered in Palo Alto, California. The general or managing partner of HPDC is HPQ Holdings, LLC.

2. Related Appeals and Interferences

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal, that are known to Appellants or Appellants' patent representative.

3. Status of Claims

Claims 1 – 66 were originally pending in the application. In a first substantive Office Action mailed on June 6, 2006, claims 2, 11 – 25, 37 – 39, 41 – 43, and 51 – 66 were withdrawn from consideration based on an earlier restriction requirement dated February 6, 2006 and on a subsequent election response by Appellants on March 6, 2006, which response included amendment of claims 27, 37 – 39, 45 – 50, 52 – 59, 61, 65, and 66 to correct improper dependencies. In response to the first substantive Office Action mailed on June 6, 2006, Appellants amended claims 1 and 44. This is an appeal from both the Final Office Action of November 3, 2006 (finally rejecting claims 1, 3 – 10, 26 – 36, 40, and 44 – 50) and the Office Action of August 24, 2007 (reopening prosecution and rejecting claims 1, 3 – 10, 26 – 40, and 44 – 50 on new grounds). The present appeal is directed to claims 1, 3 – 10, 26 – 40, and 44 – 50, i.e., all of the claims that stand rejected in this application.

4. Status of Amendments

No amendments were filed after the Final Office Action of November 3, 2006.

5. Summary of Claimed Subject Matter

In this section, insertions within square brackets [ ] indicate references to specific page and line numbers or paragraph numbers in the original specification, and reference numerals in bold type refer to the original drawings.

Claim 1 is directed to a method for forming a photonic-crystal filament (**10**), the method [specification pages 4 – 6, paragraphs 19 – 23, and FIGS 1, 2A, and 2B] comprising steps of:

a) mixing a slurry (**15**) comprising particles (**11**) of substantially uniform size and a precursor material for a desired metal (step **S10**);

b) urging the slurry (**15**) through an orifice (**35**) while forcing the particles and precursor material into a combination having a desired crystallographic configuration (steps **S30** and **S40**);

c) drying the combination (**45**) having a desired crystallographic configuration emerging from the orifice (**35**) (step **S50**); and

d) sintering the precursor material (step **S70**), whereby a photonic-crystal filament (**10**) is formed.

Claim 44 is directed to a method of cladding a metal filament, the method [specification pages 12 – 13, paragraphs 38 – 41, and FIGS. 3A – 3B] comprising the steps of:

a) providing a metal filament (**110**) (step **S20**);

b) mixing a slurry (**15**) comprising particles (**11**) of substantially uniform size and a precursor material for a desired metal (step **S10**);

c) urging the metal filament (**110**) and the slurry (**15**) through an orifice (**35**) while forcing the particles and precursor material into a combination (**45**) having a desired crystal configuration surrounding the metal filament (step **S40**);

d) drying the combination (**45**) having the desired crystallographic configuration emerging from the orifice (step **S50**);

e) sintering the precursor material (step **S70**); and

f) compressing the precursor material within a sheath (**100**) (step **S60**), while drawing the filament (**110**) and sheath (**100**) through a series of two or more successively smaller dies (**115**), whereby the filament (**110**) is clad with a photonic crystal (**10**).

6. Grounds of Rejection to be Reviewed on Appeal

The issues on appeal include whether the Examiner erred in rejecting claims 1, 3 – 5, 8, 29 – 32, 36, 40, 44 – 48, and 50 under 35 U.S.C. § 103(a) as being unpatentable over Enokido et al. (published U.S. patent application 2004/0255841) in view of Saha et al. (U.S. Pat. No. 5,268,249); whether the Examiner erred in rejecting claims 6, 7, 26 – 28, 33 – 35, and 49 under 35 USC

§ 103(a) as being unpatentable over Enokido et al. in view of Saha et al. (US 5,268,249) and further in view of Fleming et al. (U.S. Pat. No. 6,768,256); and whether the Examiner erred in rejecting claims 9 and 10 under 35 USC § 103(a) as being unpatentable over Enokido et al. in view of Saha et al. (US 5,268,249) in view of Kodas et al. (published U.S. patent application US 2003/0175411).

The record does not indicate that any of the restrictions made earlier have been withdrawn or any claim(s) rejoined. Therefore, the issues on appeal further include whether the Examiner erred in rejecting claims 37 – 39 (previously withdrawn from consideration) in the Office Action Summary of August 24, 2007 without stating any grounds for rejection of those three claims.

The record also does not indicate that any of the rejections made earlier (in the Final Office Action of November 3, 2006 finally rejecting claims 1, 3 – 10, 26 – 36, 40, and 44 – 50) have been withdrawn. Therefore, these earlier rejections are also appealed. Thus, the issues on appeal further include whether the Examiner erred in rejecting claims 1, 4 – 5, 31, 36, and 40 under 35 U.S.C. § 102(e) as anticipated by Enokido et al. (published U.S. patent application 2004/0255841); whether the Examiner erred in rejecting claims 3, 8, 29 – 30, 32, 44 – 48, and 50 under 35 USC § 103(a) as being unpatentable over Enokido et al.; whether the Examiner erred in rejecting claims 6 – 7, 26 – 28, 33 – 35, and 49 under 35 USC § 103(a) as being unpatentable over Enokido et al. in view of Fleming et al. (US 6,768,256); and whether the Examiner erred in rejecting claims 9 and 10 under 35 USC § 103(a) as being unpatentable over Enokido et al. in view of Kodas et al. (US 2003/0175411).

7. Argument

I. Legal Standards

A. Law of Anticipation

Claims 1, 4 – 5, 31, 36, and 40 have been rejected under 35 U.S.C. § 102 (e), which states:

> A person shall be entitled to a patent unless – ...
>
> (e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent ...

Under Section 102, a claim is anticipated, i.e., rendered not novel, when a prior art reference discloses every limitation of the claim. In re Schreiber, 128 F.3rd 1473, 1477 (Fed. Cir.1997). Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." In re Mills, 916 F.2d 680, 682 (Fed. Cir. 1990). "Rejections under 35 U.S.C. § 102(a) are proper only when the claimed subject matter is identically disclosed or described in the prior art." In re Arklely, Eardley, and Long, 172 U.S.P.Q. 524, 526 (CCPA 1972).

Claim terms will be given their ordinary and accustomed meaning, unless there is "an express intent to impart a novel meaning to [the] claim [term]" by the patentee. York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.3d 1568, 1572 (Fed. Cir. 1996); Sage Prods. v. Devon Indus., Inc., 126 F.3d 1420, 1423 (Fed. Cir. 1997). The ordinary and accustomed meaning of a claim term is determined by reference to dictionaries, encyclopedias, and treatises available at the time of the patent. See Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d at 1203. Such references are always available for claim construction purposes and are neither extrinsic nor intrinsic evidence. See Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202-03 (Fed. Cir. 2002).